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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**SHEET 1 of 1**

**COMPLETE IF KNOWN**

Application Number	10/727,124
Confirmation Number	4751
Filing Date	December 3, 2003
First Named Inventor	Francisco Arias et al.
Group Art Unit	1732
Examiner Name	
Attorney Docket Number	8459D

**U. S. PATENT DOCUMENTS**

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## FOREIGN PATENT DOCUMENTS

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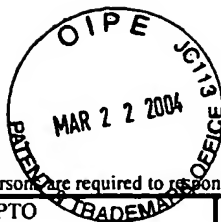
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SHEET 1 of 4

### COMPLETE IF KNOWN

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### U. S. PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No. <sup>1</sup>	DOCUMENT NUMBER Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
MoV		US-3,918,449	11/11/1975	Pistor	
A		US-3,964,482	06/22/1976	Gerstel et al.	
		US-4,055,029	10/25/1977	Kalbow	
		US-4,180,232	12/25/1979	Hardigg	
		US-4,381,963	05/03/1983	Goldstein et al.	
		US-4,585,991	04/29/1986	Reid et al.	
		US-4,784,737	11/15/1988	Ray et al.	
		US-4,837,049	06/06/1989	Byers et al.	
		US-5,134,079	07/28/1992	Cusack et al.	
		US-5,156,591	10/20/1992	Gross et al.	
		US-5,158,073	10/27/1992	Bukowski	
		US-5,162,043	11/10/1992	Lew et al.	
		US-5,198,192	03/30/1993	Saito et al.	
		US-5,215,088	06/01/1993	Normann et al.	
		US-5,250,023	10/05/1993	Lee et al.	
		US-5,250,067	10/05/1993	Gelfer et al.	
		US-5,256,360	10/26/1993	Li	
		US-5,279,544	01/18/1994	Gross et al.	
		US-5,318,557	06/07/1994	Gross	
		US-5,362,307	11/08/1994	Guy et al.	
		US-5,383,512	01/24/1995	Jarvis	
		US-5,498,235	03/12/1996	Flower	
		US-5,512,219	04/30/1996	Rowland et al.	
		US-5,527,288	06/18/1996	Gross et al.	
		US-5,551,953	09/03/1996	Lattin et al.	
		US-5,591,123	01/07/1997	Sibalis et al.	
		US-5,591,139	01/07/1997	Lin et al.	
		US-5,611,806	03/18/1997	Jang	
		US-5,645,977	07/08/1997	Wu et al.	
		US-5,658,515	08/19/1997	Lee et al.	
		US-5,676,850	10/14/1997	Reed et al.	
		US-5,681,580	10/28/1997	Jang et al.	
		US-5,704,520	01/06/1998	Gross	
		US-5,711,761	01/27/1998	Untereker et al.	
		US-5,728,089	03/17/1998	Lal et al.	
		US-5,730,714	03/24/1998	Guy et al.	
		US-5,735,273	04/07/1998	Kurnik et al.	
		US-5,771,890	06/30/1998	Tamada	
		US-5,800,420	09/01/1998	Gross et al.	
		US-5,807,375	09/15/1998	Gross et al.	
		US-5,814,020	09/29/1998	Gross	
		US-5,820,622	10/13/1998	Gross et al.	
MoV		US-5,827,183	10/27/1998	Kurnik et al.	

*M. Vaz*

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SHEET 2 of 4

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**U. S. PATENT DOCUMENTS (cont.)**

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MV		US-5,848,985	12/15/1998	Muroki	
		US-5,848,990	12/15/1998	Cirelli et al.	
		US-5,848,991	12/15/1998	Gross et al.	
		US-5,855,801	01/05/1999	Lin et al.	
		US-5,879,326	03/09/1999	Godshall et al.	
		US-5,938,684	08/17/1999	Lynch et al.	
		US-5,948,488	09/07/1999	Marecki et al.	
		US-5,964,729	10/12/1999	Choi et al.	
		US-6,023,629	02/08/2000	Tamada	
		US-6,036,659	03/14/2000	Ray et al.	
		US-6,038,465	03/14/2000	Melton, Jr.	
		US-6,047,208	04/04/2000	Flower	
		US-6,083,196	07/04/2000	Trautman et al.	
		US-6,091,975	07/18/2000	Daddona et al.	
		US-6,106,751	08/22/2000	Talbot et al.	
		US-6,129,696	10/10/2000	Sibalis	
		US-6,132,755	10/17/2000	Eicher et al.	
		US-6,219,574 B1	04/17/2001	Cormier et al.	
		US-6,256,533 B1	07/03/2001	Yuzhakov et al.	
		US-6,312,612 B1	11/06/2001	Sherman et al.	
		US-6,334,856 B1	06/01/2002	Allen et al.	
		US-6,375,627 B1	04/23/2002	Mauze et al.	
		US-6,379,324 B1	04/30/2002	Gartstein et al.	
		US-6,440,096 B1	08/27/2002	Lastovich et al.	
		US-6,451,240 B1	09/17/2002	Sherman et al.	
		US-6,471,903 B2	10/29/2002	Sherman et al.	
		US-6,476,288 B1	11/05/2002	VanRijswijk et al.	
		US-6,494,830 B1	12/17/2002	Wessel	
		US-6,533,884 B1	03/18/2003	Mallik	
		US-6,565,532 B1	05/20/2003	Yuzhakov et al.	
		US-6,591,124 B2	07/08/2003	Sherman et al.	
		US-6,663,820 B2	12/16/2003	Arias et al.	
		US-2001/0023324 A1	09/20/2001	Pronovost et al.	
		US-2002/0006355 A1	01/17/2002	Whitson	
		US-2002/0045859 A1	04/18/2002	Gartstein et al.	
		US-2002/0045907 A1	04/18/2002	Sherman et al.	
		US-2002/0133129 A1	09/19/2002	Arias et al.	
MV		US-2002/0177858 A1	11/28/2002	Sherman et al.	

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**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIALS*	Cite No.†	FOREIGN PATENT DOCUMENT	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T*
PDV		DE 196 24 578 A1	01/08/1998	Divers		X
↑		DT 23 19 591 abstract	11/14/1974	Kirchner		
		EP 0 312 662 A1	04/26/1989	Vlock		
		EP 0 407 063 A1	01/09/1991	Filipski et al.		
		EP 0 796 128 B1	06/13/1996	Effenhauser et al.		
		EP 1 086 719 A1	03/28/2001	Sage et al.		
		EP 1 174 078 A2	01/23/2002	Whitson		
		FR 2,535,602 abstract	05/11/1984	Bernard		
		GB 783,479	09/25/1957	Grandemange		
		GB 2,221,394 A	02/07/1990	Ellertsen		
		JP 09-051878 abstract	02/25/1997	Yuji et al.		
		SU 1 667 864 abstract	08/07/1991	Demchenko et al.		
		WO 93/17754 A1	09/16/1993	Gross et al.		
		WO 94/23777 A1	10/27/1994	Gross et al.		
		WO 95/33612 A2	08/24/1995	Kirschling et al.		
		WO 96/00109 A1	01/04/1996	Tamada		
		WO 96/37155 A1	11/28/1996	Godshall et al.		
		WO 96/37256 A1	11/28/1996	Godshall		
		WO 97/48440 A1	12/24/1997	Cormier et al.		
		WO 97/48441 A1	12/24/1997	Cormier et al.		
		WO 97/48442 A1	12/24/1997	Cormier et al.		
		WO 98/00193 A1	01/08/1998	Eppstein		
		WO 99/00155 A1	01/07/1999	Lebouitz et al.		
		WO 99/29298 A2	06/17/1999	Trautman et al.		
		WO 99/29364 A1	06/17/1999	Zuck		
		WO 99/29365 A1	06/17/1999	Zuck et al.		
		WO 99/64580 A1	12/16/1999	Prausnitz et al.		
		WO 00/05166 A1	02/03/2000	Canham et al.		
		WO 00/35530 A1	06/22/2000	McConnell et al.		
		WO 00/74763 A2	12/14/2000	Prausnitz et al.		
		WO 00/74765 A1	12/14/2000	Yuzhakov et al.		
		WO 00/74766 A1	12/14/2000	Garstein et al.		
		WO 02/07813 A1	01/31/2002	Dalton et al.		
		WO 02/32331 A2	04/25/2002	Sherman et al.		
		WO 03/24290 A1	03/27/2003	Gartstein et al.		
PDV		WO 03/24518 A2	03/27/2003	Gartstein et al.		

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	First Named Inventor	Francisco Arias et al.
	Group Art Unit	1732
	Examiner Name	
	Attorney Docket Number	8459D

### NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIALS*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	<sup>2</sup>
MDV		MCALLISTER, H., "Micromachined Microneedles for Transdermal Drug Delivery", Allen & Prausnitz, Georgia Institute of Technology, Atlanta, GA.	
↑		SEBASTIAN, H. et al., "Microfabricated Microneedles: A Novel Approach to Transdermal Drug Delivery", JOURNAL OF PHARMACEUTICAL SCIENCES, August, 1998, pp. 922-925, Vol. 87, No. 8, Atlanta, GA.	
		CHUN, K. et al., "An Array of Hollow Microcapillaries for the Controlled Injection of Genetic Materials into Animal/Plant Cells, The University of Tokyo.	
		WOUTERS, S. et al., "Microelectrochemical Systems for Drug Delivery", ELECTROCHIMICA ACTA., 1997, pp. 3385-3390, Vol. 42, Nos. 20-22.	
		PRAUSNITZ, M. R., et al., "Transdermal Delivery of Macromolecules: Recent Advances by Modification of Skin's Barrier Properties", THERAPEUTIC PROTEIN AND PEPTIDE FORMULATION AND DELIVERY, pp. 124-153, Chapter 8, ACS Symposium Series 675, Georgia Institute of Technology.	
		PRAUSNITZ, M. R., et al., "Transdermal Transport Efficiency During Skin Electroporation and Iontophoresis, JOURNAL OF CONTROLLED RELEASE 38, 1996, pp. 205-217, Massachusetts Institute of Technology, Cambridge, MA.	
MDV		PAPAUTSKY, I. E., et al., "Micromachined Pipette Arrays (MPA)", pp. 2281-2284, Proceedings - 19 <sup>th</sup> International Conference - IEEE/EMBS October 30-November 2, 1997, Chicago, IL	
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